

tttgttttaacaaacatgtttattagaaaagtaaaaatattgcataggtcttagtacttgaacatcaagtgtatt 75  
catgaaccgtgagtatcttcatgtaaacagttcttagATGGAAGACCCAGGTGGCGCTCCTCTGGGGGAGAGGGTT 150  
\* M E D P G G A P L G E R V 13

CCAGCCCCCACCCTCAGCCCCATCCCCTCACAGCTCACTCCTCCAGTACACCGGCACCGGGATGGGCTGGG 225  
P A P H P P Q P H P L T A H S S S T P A P G W A G 38

ATGCAGCTCCAGGACCCCTCCCTCCTCACCACACCCTGGCTGCCCCGCTCCCGCCAGGCCTTGCCGGACCCGGCG 300  
M Q L Q D P L P P H H T L A A R S R Q A L P D P A 63

CGGTCTACTCTTCCCTGTCACCCACAGTCACCCACGGGCGGGTATCGGCACCCCAAGCGCAAAGCTGACGTGCCCC 375  
A S T L P C H P Q S P R A G I G T P S A K L T C P 88

CCCGTGGGTCCCCCCATCTCCACCGCCAGTCCCCGGCAGCGATGAGACAGAGCGGCACCTCCCAGCCCCCTG 450  
P V R S P P S P T A Q S P A A M R Q S G T S Q P L 113

CTGATCAACATGTACCTACCAGATCCCGTCGGAGATGGTCTTTTAAAGGAAGGGAAGAGCCCGAGCTGGGGGCCG 525  
L I N M Y L P D P V G D (G L F K E G K S) P S W G P 138

CTGAGCCCTGCGGTACAGAAAGGCAGCGGGCAGATCCAGTTGTGGCAGTTTCTACTGGAGCTGCTGGCAGACCGC 600  
L S P A V Q K G S G Q I O L W O F L L E L L A D R 163

GCGAACCGCGGTGCATCGCGTGGGAGGGCGGCCACGGCGAGTTCAAGCTACCGACCCGACGAGGTGGCGCGA 675  
A N A G C I A W E G G H G E F K L T D P D E V A R 188

CGCTGGGGCGAGCGCAAGAGCAAGCCCAATATGAACTACGACAAGCTAAGTCGAGCACTGCGCTACTACTACGAC 750  
R W G E R K S K P N M N Y D K L S R A L R Y Y Y D 213

AAAAACATCATGAGCAAGGTGCACGGCAAGCGCTACGCCTACCGCTTGACTTCCAGGGCCTGGCACAGGCTTGC 825  
K N I M S K V H G K R Y A Y R F D F Q G L A Q A C 238

CAGCCACCACCCGCGCACGCCCACGCCGCCGCTGCCGCCGCCGAGCGGCAGCCGCCGCCAGGATGGCGCACTT 900  
Q P P P A H A H A A A A A A A A A A A A Q D G A L 263

TACAAGCTCCCGGCTGGTCTGGCTCCACTGCCCTTCCCCGGCCTCTCCAACTCAACCTTATGGCAGCCTCGGCC 975  
Y K L P A G L A P L P F P G L S K L N L M A A S A 288

GGCGTGGCGCCCGCTGGCTTCTCTTACTGGCCTGGTCCCAACGCCACCGCCGCTGCCGCCGCCACCGCTGCGCTC 1050  
G V A P A G F S Y W P G P N A T A A A A A T A A L 313

TACCCAACCCCGGCTTGCAGCCCCCTCCCGGGCCCTTTGGCGCGGTGGCCGCCGCTTCGCACTTGGGGGGTCAT 1125  
Y P T P G L Q P P P G P F G A V A A A S H L G G H 338

TATCACTagacgggaaggccgggtgcagtggggcctctccacacagccagtgaccaatcccatectcctcctctgg 1200  
Y H \*

gaggagccccgaagatttccccgacgttcctttaccacagatttcggttgacgagccgctcccagccccaggaag 1275  
aaaggatgggaagcctctgaggtcttccctgaatacagaggttccaggtcccattatcatcacccaggaagg 1350  
tgcatgtgctcccaactttaatttttctcttccaagtctccagattctggaactccgctctttttttctctctc 1425  
acctggagccctgccttctctttatgacccctagttttctgttttgttttttttctctctctctctc 1500  
atttttttctctccacgacctactccaaacggtagtacctcggttagctcgaggcttctcacactccctt 1575  
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aaaaaaaaaaaaaaaaaaaaaaaaaaaa

FIG. 1

	5	15	25	35	45	55	65	75	85	
RATPET	GSQIQ-LWQ	FLLELLADRA	N--AGCIAWE	G-GHGEFKLT	--DPDEVARR	WGERK-SKPN	MNYDKLSRAL	RYYDKNIMS	KVH-GKRYAY	RF
MUSFL1	GSQIQ-LWQ	FLLELLSDSA	N--ASCITWE	G-TNGEFKMT	--DPDEVARR	WGERK-SKPN	MNYDKLSRAL	RYYDKNIMT	KVH-GKRYAY	KF
HUMERG	GSQIQ-LWQ	FLLELLSDSS	N--SSCITWE	G-TNGEFKMT	--DPDEVARR	WGERK-SKPN	MNYDKLSRAL	RYYDKNIMT	KVH-GKRYAY	KF
DROETS3	GSQIQ-LWQ	FLLELLSDSN	N--ASCITWE	G-TNGEFKLT	--DPDEVARR	WGERK-SKPN	MNYDKLSRAL	R-----	-----	--
DROETS6	SGGPIQ-LWQ	FLLELLADSS	N--ANASISWE	G-QSGEFRLI	--DPDEVARR	WGERK-AKPN	MNYDKLSRAL	RYYDKNIMT	KVH-GKRYAY	KF
RATETS1	SGGPIQ-LWQ	FLLELLTDKS	C--QSFISWT	G-DGWEFKLS	--DPDEVARR	WGERK-NKPK	MNYDKLSRGL	RYYDKNIIH	KTA-GKRYAY	RF
VETS	SGGPIQ-LWQ	FLLELLTDKS	C--QSFISWT	G-DGWEFKLS	--DPDEVARR	WGERK-NKPK	MNYDKLSRGL	RYYDKNIIH	KTA-GKRYAY	RF
MUSETS2	SGGPIQ-LWQ	FLLELLSDKS	C--QSFISWT	G-DGWEFKLT	--DPDEVARR	WGERK-NKPK	MNYDKLSRGL	RYYDKNIIH	KTS-GKRYAY	RF
DROPNT1	SGGPIQ-LWQ	FLLELLLDKT	C--QSFISWT	G-DGWEFKLT	--DPDEVARR	WGERK-NKPK	MNYDKLSRGL	RYYDKNIIH	KTA-GKRYAY	RF
MUSER71	HRGPIQ-LWQ	FLLELLQDGA	R--SSCIRWT	G-NSREFFQLC	--DPDEVARR	WGERK-NKPK	MNYDKLSRGL	RYYDKNIIH	KSG-GRKTYT	RF
DROELG	NNQVQ-LWQ	FLLELLTDCE	H--TDVIEWV	G-TEGEFKLT	--DPDEVARR	WGERK-NKPK	MNYDKLSRGL	RYYDKNIIH	KSG-GRKTYT	RF
MUSGABP	NNQIQ-LWQ	FLLELLTDKD	A--RDCISWV	G-DEGEFKLN	--DPDEVARR	WGERK-NKPK	MNYDKLSRGL	RYYDKNIIH	KVS-GKRFAY	KF
HUMERM	RRGSLQ-LWQ	FLVTLDDPA	N--AHFIAWT	G-RGMEFKLI	--EPEEVARR	WGIQK-NRPA	MNYDKLSRSL	RYYDKNIIH	KVQ-GKRFAY	KF
HUMER81	RRGSLQ-LWQ	FLVALDDPA	N--SHFIAWT	G-RGMEFKLI	--EPEEVARR	WGIQK-NRPA	MNYDKLSRSL	RYYDKNIIH	KVA-GERYVY	KF
HUME1AF	RRGALQ-LWQ	FLVALDDPT	N--AHFIAWT	G-RGMEFKLI	--EPEEVARR	WGIQK-NRPA	MNYDKLSRSL	RYYDKNIIH	KVA-GERYVY	KF
MUSPEA3	RRGALQ-LWQ	FLVALDDPT	N--AHFIAWT	G-RGMEFKLI	--EPEEVARR	WGIQK-NRPA	MNYDKLSRSL	RYYDKNIIH	KVA-GERYVY	KF
HUMPEP1	GSRIQ-LWH	FILELLQKEE	F--RHVIAWQ	QGEYGEFVK	--DPDEVARR	WGERK-CKPQ	MNYDKLSRAL	RYYDKNIIH	KTK-GKRFY	KF
HUMELK1	MDPSVT-LWQ	FLQLLREQ	N--GHISWT	SRDGGEFKLV	--DAEEVARR	WGLRK-NKTN	MNYDKLSRAL	RYYDKNIIH	KVS-GQKFVY	KF
MUSSAP1	MESAIT-LWQ	FLQLLQEPQ	N--EHMICWT	SNNG-EFKLL	--DAEEVARR	WGLRK-NKTN	MNYDKLSRAL	RYYDKNIIH	KVI-GQKFVY	KF
MUSNET	MESAIT-LWQ	FLHLLLDQK	H--EHLICWT	SNDG-EFKLL	--KAEVAVL	WGLRK-NKTN	MNYDKLSRAL	RYYDKNIIH	KVI-GQKFVY	KF
DROE74A	REGSTTYLWE	FLKLLODRE	Y-CPRFIKWT	NREKGVFKLV	--DSKAVSRL	WGMHK-NKPD	MNYETMGRAL	RYYQORGILA	KVD-GQRLVY	QF
MUSELF1	GKGNITTYLWE	FLLALLQDKA	T-CPKYIKWT	QREKGIKLV	--DSKAVSRL	WGMHK-NKPD	MNYETMGRAL	RYYQORGILA	KVE-GQRLVY	QF
HUMERF1	GKGNITTYLWE	FLDLLOQDN	T-CPRYIKWT	QREKGIKLV	--DSKAVSKL	WGMHK-NKPD	MNYETMGRAL	RYYQORGILA	KVE-GQRLVY	QF
HUMNERF1	GKGNITTYLWE	FLDLLOQDN	T-CPRYIKWT	QREKGIKLV	--DSKAVSKL	WGMHK-NKPD	MNYETMGRAL	RYYQORGILA	KVE-GQRLVY	QF
DROETS4	GGGSHIHLWQ	FLKELLASPO	V-NGTAIRWI	DRSKGIFKIE	--DSVRVAKL	WGRRK-NRPA	MNYDKLSRSI	RYYQORGILA	KVE-GQRLVY	QF
HUMESX	HAPRGTHLWE	FIRDILIHPE	L-NEGLMKWE	NRHEGVFKFL	--RSEAVAQL	WQOKK-KNSN	MTYEKLSRAM	RYYQORGILA	KVE-GQRLVY	QF
DROYAN	PNTNGRLWLD	FLQQLLNDRN	QKYSDDLIAWK	CRDTGVFKIV	--DPAGLAKL	WGIQK-NHLS	MNYDKMSRAL	RYYQORGILA	KVE-GQRLVY	QF
MUSPU1	SKKKIR-LYQ	FLDLRLSGD	MK--DSIWWV	DKDKGTFFQS	SKHKEALAH	WGIQKGRKK	MTYQKMARAL	RYYQORGILA	KVE-GQRLVY	QF
HUMTEL	RIADCRLLWD	VYVQLLSDS-	-RYENFIRWE	DKESKIFRIV	--DPNGLARL	WGNHK-NRTN	MTYEKMSRAL	RYYQORGILA	KVE-GQRLVY	QF

FIG. 2A

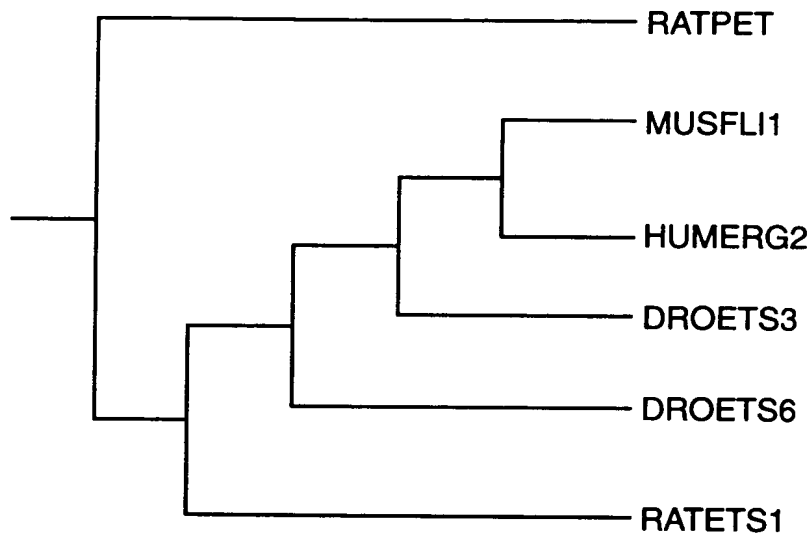
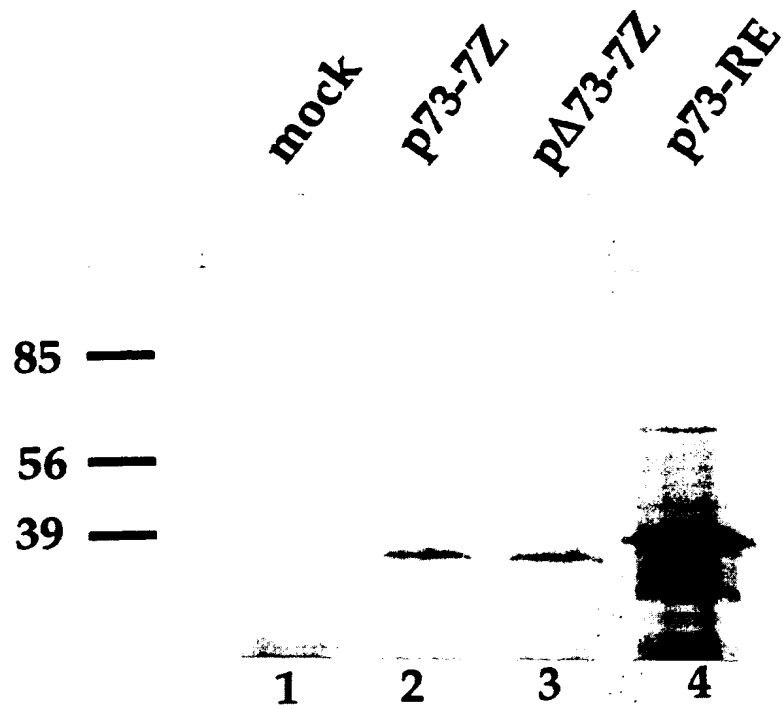
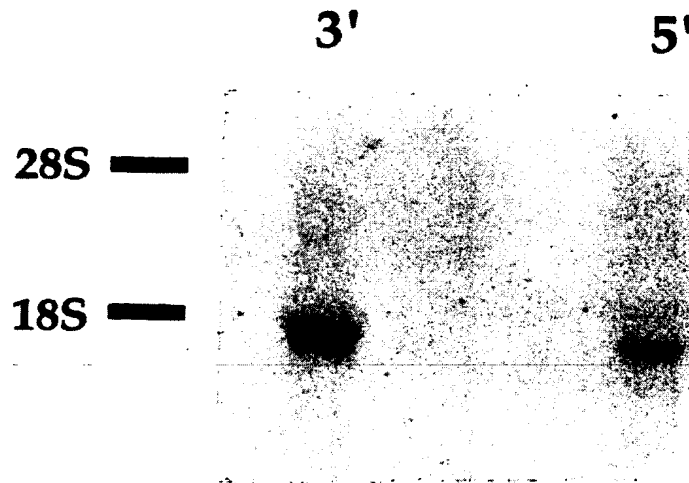


FIG. 2B

**A**

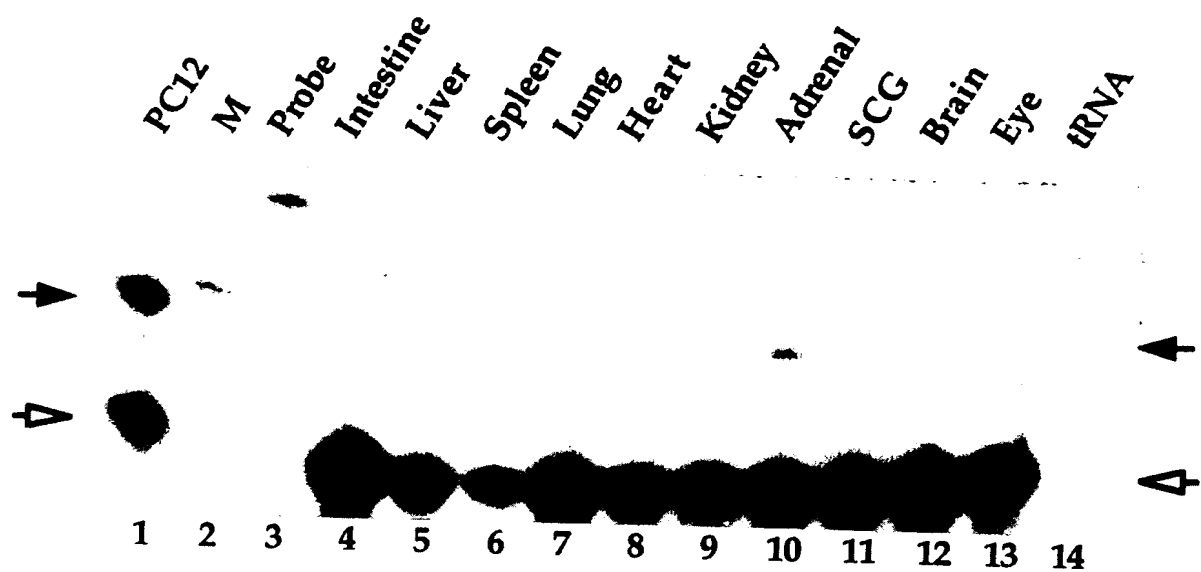


**B**



**FIG. 3**

A



B

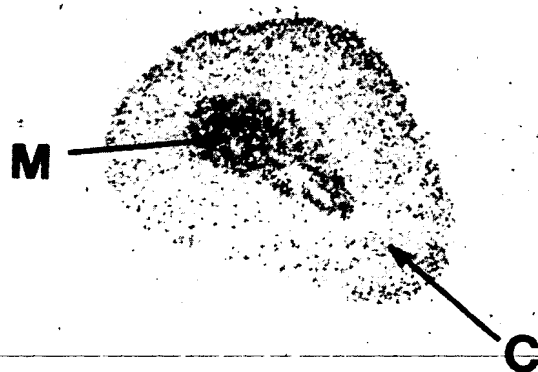


FIG. 4

anti-EE	-	-	-	-	-	-	-	+
EE-PET-1	-	-	+	+	+	+	+	+
wt PEA3	-	-	-	+	++	-	-	-
mut PEA3	-	-	-	-	-	+	++	-

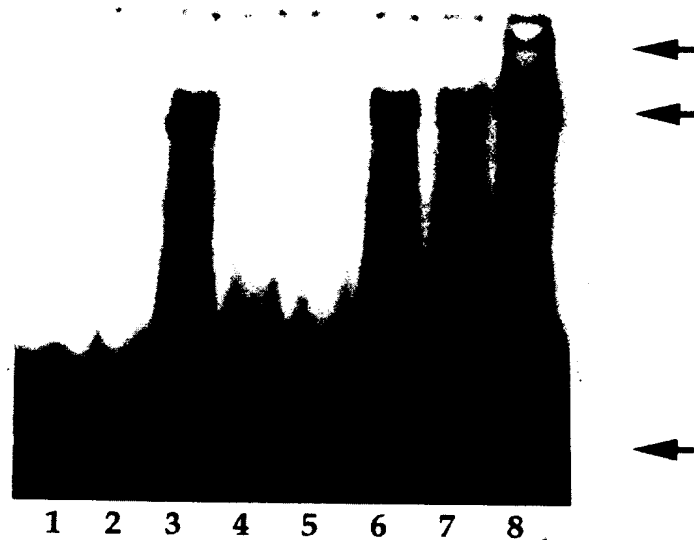


FIG.5

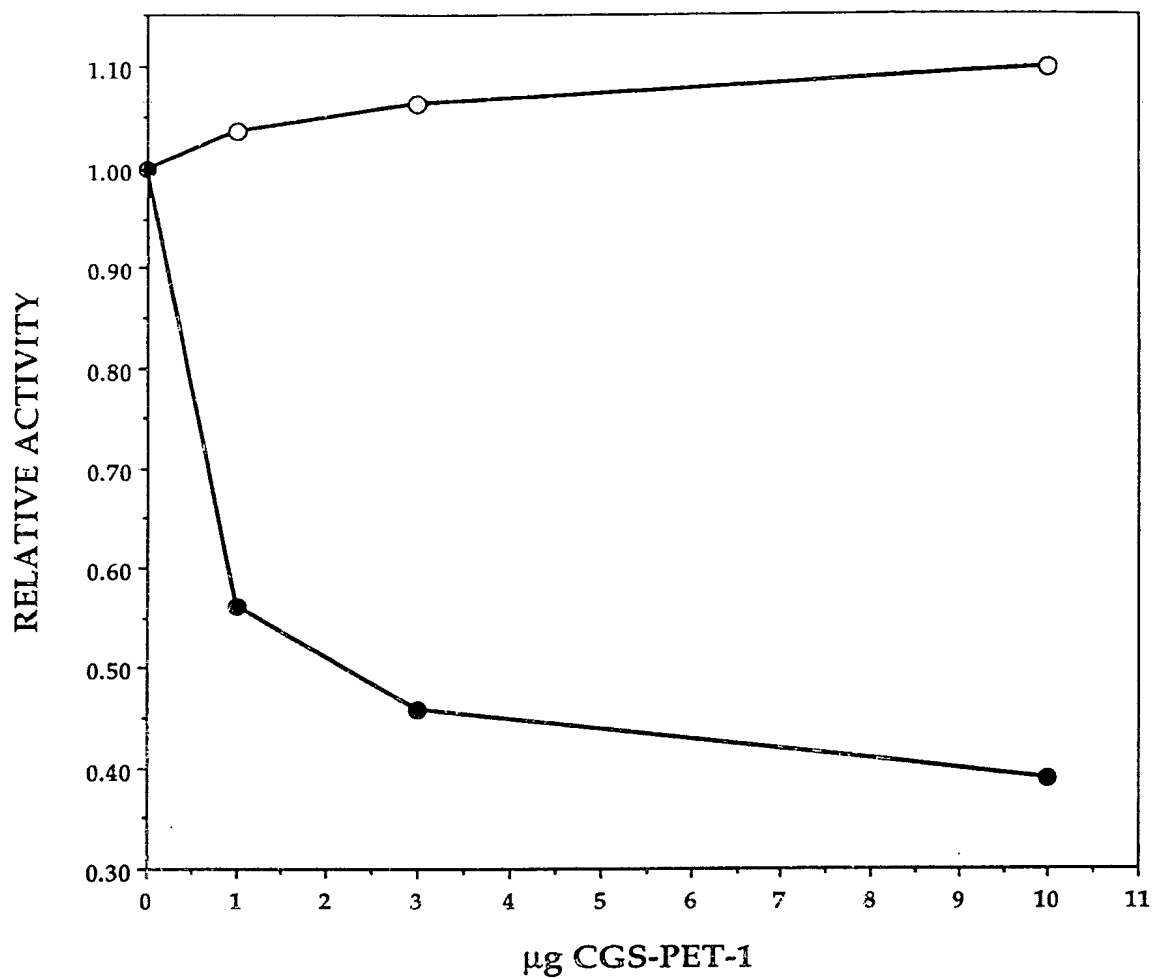


FIG. 6

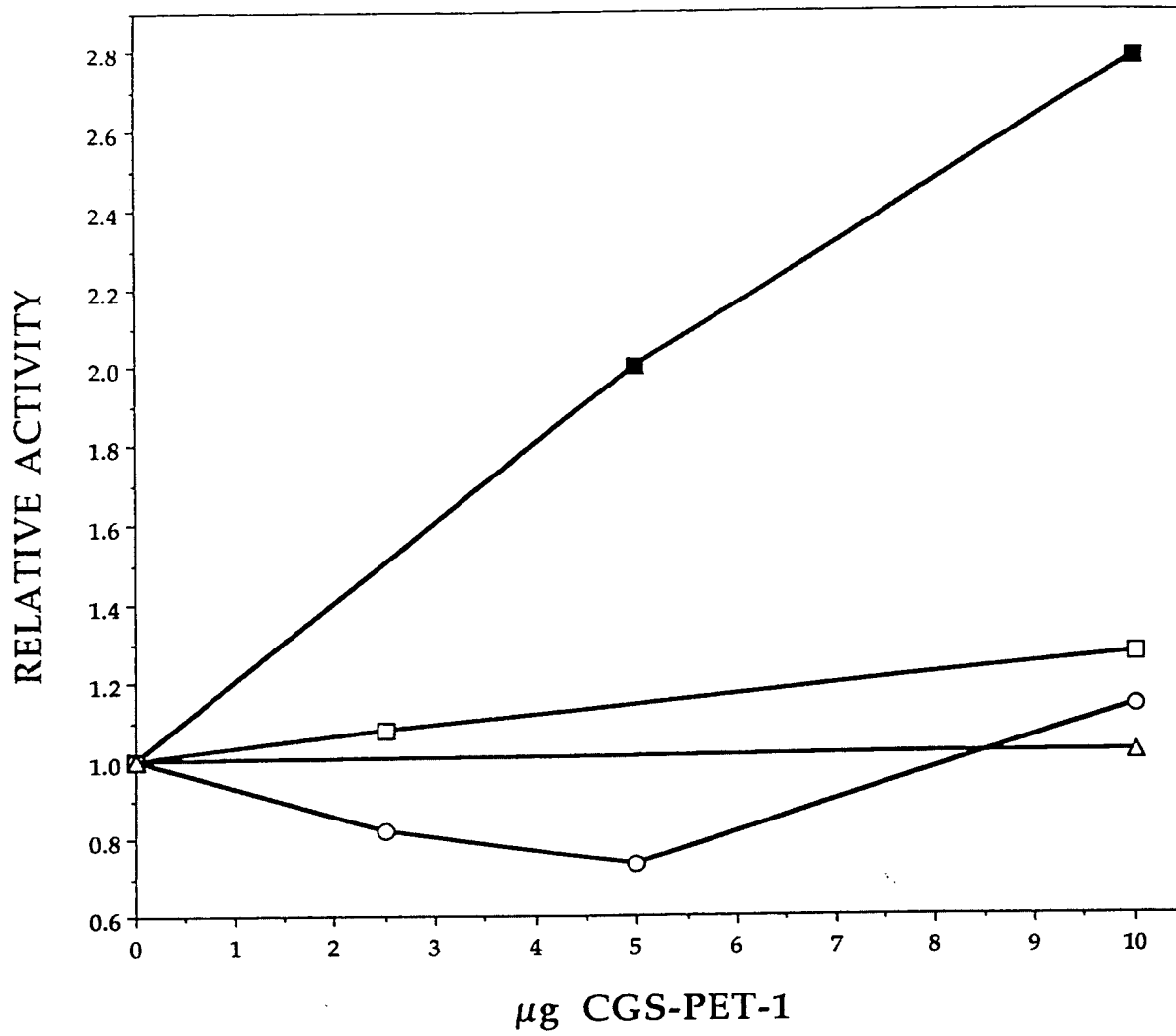


FIG. 7



B7 —  
B8 —  
B9 —

B7 —  
B8 —

B6 —  
B5 —

B3

B4 —

B1 —  
B2 —  
B3 —

B2 —

FIG. 8



FIG. 9

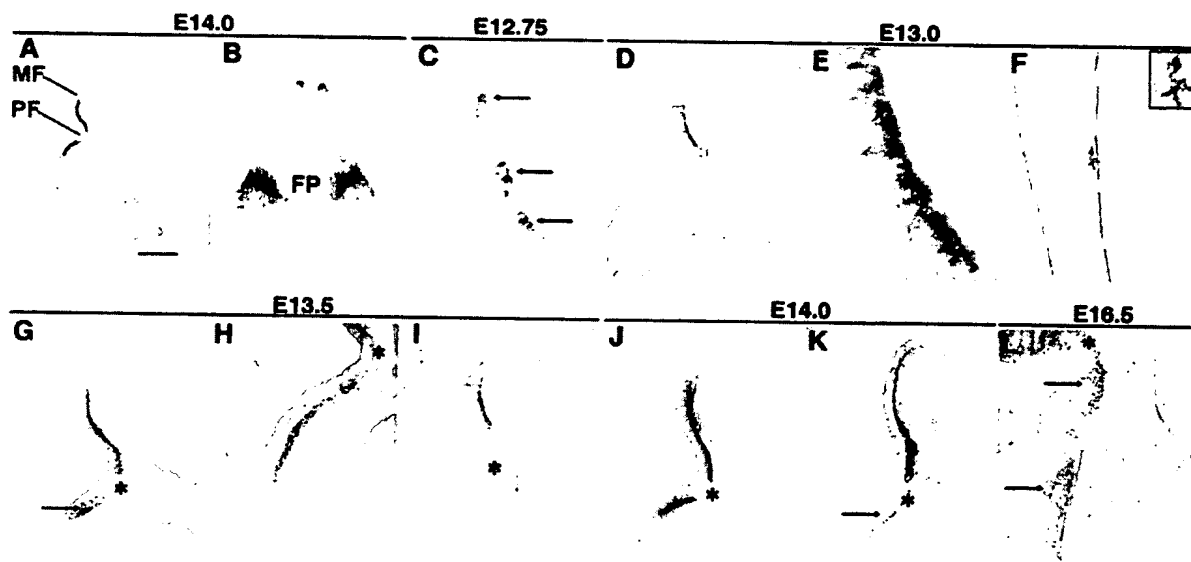


FIG.10

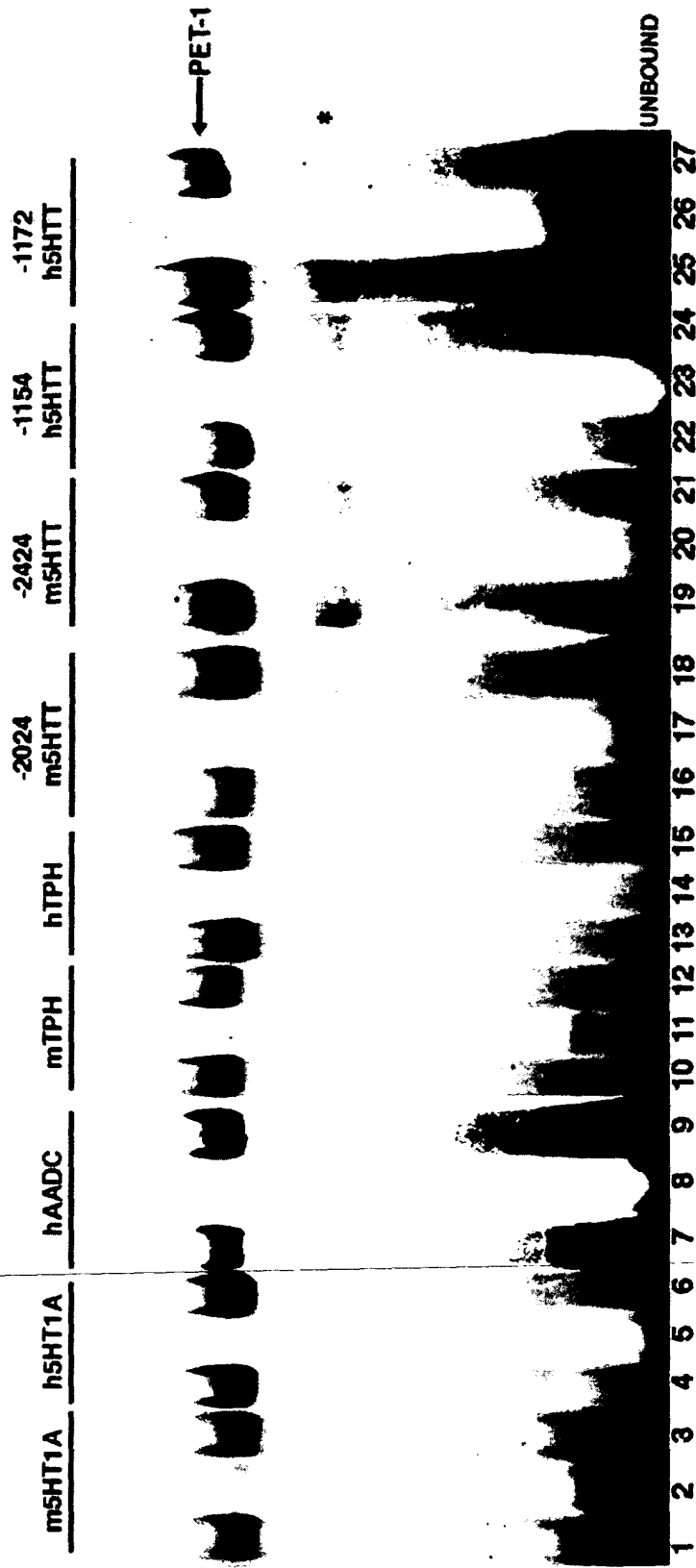
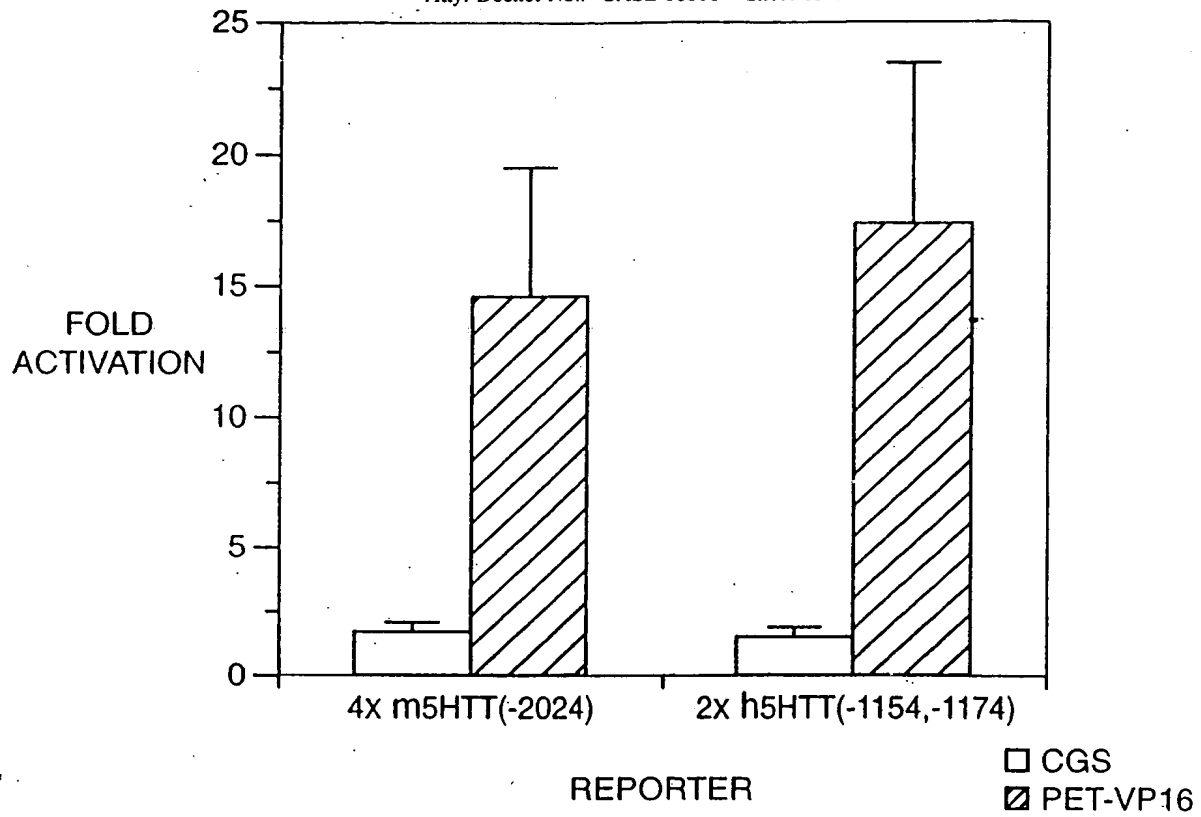
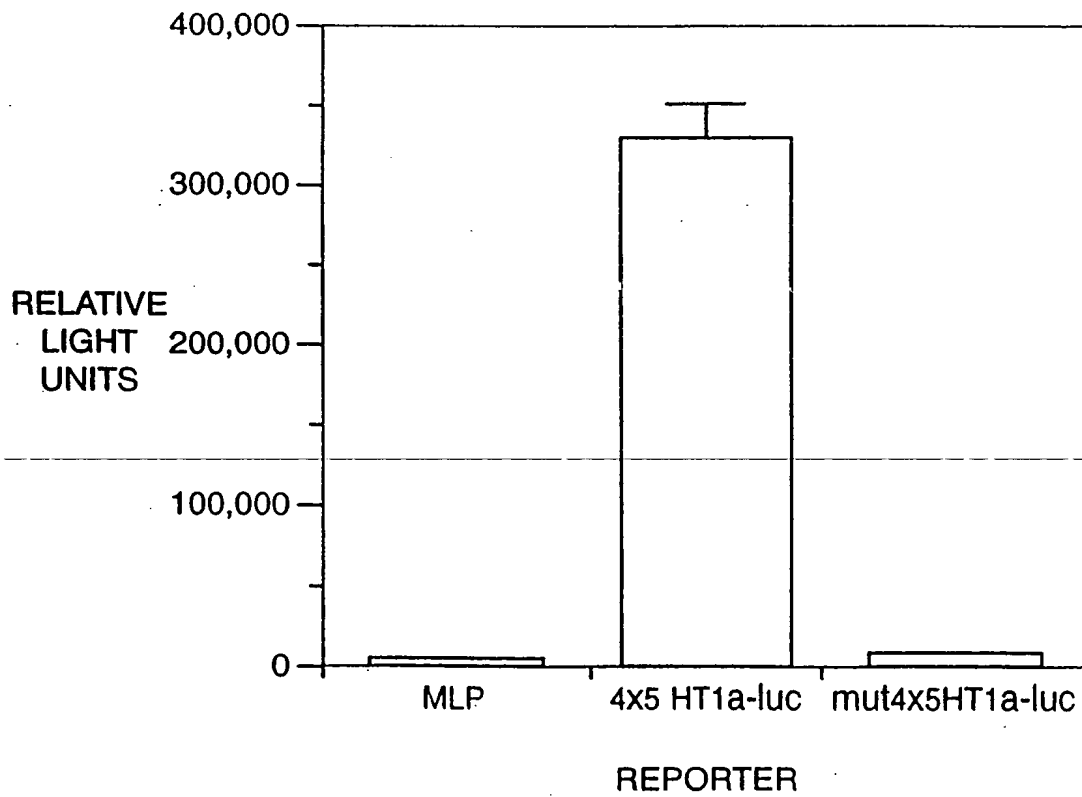


FIG.11



**FIG. 12A**



**FIG. 12B**